Acta Zootaxonomica Sinica, 30 (3): 524 - 526 (July, 2005) ISSN 1000-0739
动物分类学报

TWO NEW SPECIES OF THE GENUS THERIDION FROM HUNAN PROVINCE, CHINA (ARANEAE, THERIDIIDAE)

TANG Guo, YIN Chang-Min *, PENG Xian-Jin
College of Life Sciences, Hunan Normal University, Changsha 410081, *China*

Abstract This paper deals with two new species of the genus Theridion: Theridion hufengensis sp. nov. (can be separated from T. qionghaiensis Zhu, 1998) and Theridion fruticum sp. nov. (can be separated from T. karamyensis Zhu, 1998). Type specimens are deposited in College of Life Sciences, Hunan Normal University. Measurements given are in mm.

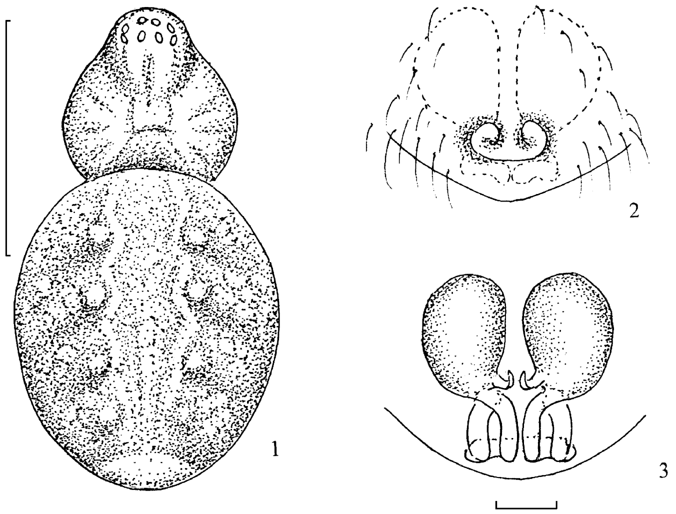
Key words Araneae, Theridiidae, Theridion, new species.

Two new species of the genus Theridion were identified during an examination of spider specimens collected from Mt. Huping National Nature Reserve, Hunan Province. They are: Theridion hufengensis sp. nov. and Theridion fruticum sp. nov.

Abbreviations used: AER = anterior eye row, AH = abdomen height, AL = abdomen length, AW = abdomen width, AME = anterior median eye, ALE = anterior lateral eye, AME-AME = interval between AMEs, AME-ALE = interval between AME and ALE, CH = Clypeus height, CL = carapace length, CW = carapace width, MOQL = median ocular quadrate-length, MOQWA = median ocular quadrate width of the anterior, MOQWP = median ocular quadrate width of the posterior, PER = posterior eye row, PME = posterior median eye, PLE = posterior lateral eye, PME-PME = interval between PMEs, PME-PLE = interval between PME and PLE, TL = total length. Legmeasurements are shown as follows: total length (femur, patella + tibia, metatarsus, tarsus).

Theridion hufengensis sp. nov. (Figs. 1-3)

Measurements. Female: TL 2.00, CL 0.60, CW 0.50; AL 1.50, AW 1.00, AH 1.00. AME 0.07 < ALE = PLE 0.08 < PME 0.09, AME-AME 0.12 > AME-ALE 0.10, PME-PME = PME-PLE 0.12, MOQWA = MOQWP 0.12. Leg measurements: **I** 3.00 (1.10, 0.080, 0.50, 0.50), **II** 2.70 (1.00, 0.70, 0.50, 0.50), **III** 1.80 (0.60, 0.60, 0.30, 0.30), **IV** 2.60 (1.00, 0.80, 0.50, 0.30); formula **I**, **II**, **III**, **IV**.



Figs. 1-3. Theridion hufengensis sp. nov. 1. Body (♀). 2. Epigynum. 3. Vulva. Scale bars: 1 = 1.0 mm; 2, 3 = 0.1 mm.

Description. Carapace grayish black. Radial

This project was supported by the Natural Science Foundation of the Education, Science and Technology Department of Hunan Province and the National Natural Science Foundation of China (30050002).

* Corresponding author; E-mail: yincm@hunnu.edu.cn

Received 9 Mar. 2005, accepted 15 Apr. 2005.

grooves indistinct. Fovea transverse, anteriorly with a quadrate spot. The forehead protruded. Eyes area elevated. AER recurved, PER slightly procurved. AME with black loop, the other eyes surrounded with reddish brown loop. PME subtriangular. Sternum dark brown, inversely triangular. Chelicera brown with 1 big promarginal tooth, no retromarginal. Endite, labium light grayish brown. Legs light yellow, distal ends of femur, patella, tibia and metatarsus black brown. Abdomen gray black, dorsum scattered with white small spots, more hair on the back half, median area with two ripple-shaped longitudinal white spots, lateral area with 4 pairs of black spots equally arranged in distance. Venter of abdomen grayish brown.

Epigynum protruded on the median area. Atrium lies on the subaxial area. Spermathecae large. Copulatory ducts bent outwards, then twisted upwards.

Male. Unknown.

Diagnosis. This species can be separated from Theridion qionghaiensis Zhu, 1998 by: 1) the different markings on abdomen; 2) atrium with median-septum but absent in the latter; 3) the different course of copulatory ducts.

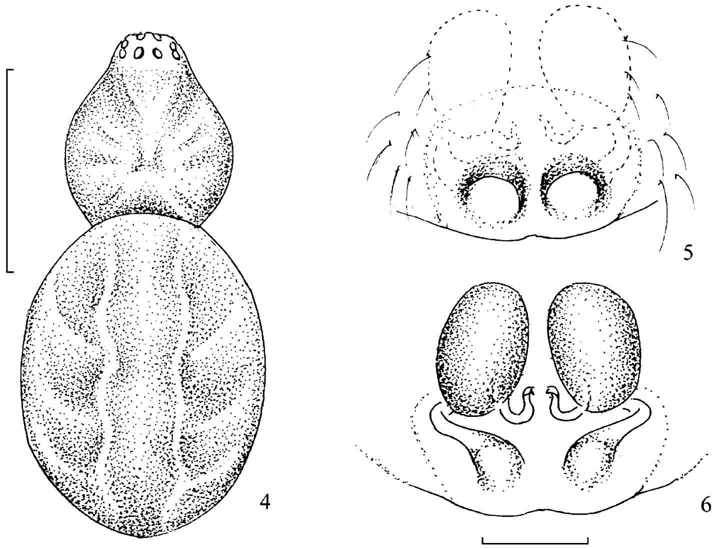
Holotype ♀, Mt. Huping, Shimen County (29°35′N, 111°22′E, 1 000-1 300 m), Hunan Province, 3 July 2003, collected by TANG Guo.

Distribution. China (Hunan).

Etymology. This specific name refers to the type locality: Hufeng in Mt. Huping.

Theridion fruticum sp. nov. (Figs. 4-6)

Measurements. Female: TL 2.20-2.80. Holotype measured: TL 2.20, CL 0.80, CW 0.70; AL 1.40, AW 0.95, AH 1.30. AME 0.08 < ALE = PLE 0.09 < PME 0.10, AME-AME 0.20 > AME-ALE 0.15, PME-PME 0.20 > PME-PLE 0.15, MOQL 0.22 > MOQW 0.20. Legs: I 4.00 (1.10, 1.90, 0.70, 0.30), II 2.90 (0.90, 1.10, 0.60, 0.30), III 1.90 (0.55, 0.55, 0.50, 0.30), IV 2.92 (1.00, 1.00, 0.60, 0.32); formula I, IV, II, III.



Figs. 4-6. Theridion fruticum sp. nov. 4. Body (♀). 5. Epigynum. 6. Vulva. Scale bars: 4 = 1.0 mm; 5, 6 = 0.1 mm.

Description. Carapace gray black with darker edge. Cervical and radial grooves indistinct. Fovea transverse. Ocular area elevated. The forehead protruded. AER recurved, PER slightly procurved. Sternum grayish black, inversely triangular. Chelicera brown with 1 big promarginal tooth, no retromarginal. Endite, labium light grayish black. Legs light yellow, femur, patella, tibia and metatarsus with grayish black spots. Abdomen elongated ellipsoid. Dorsum light grayish black; median area with a gray stripe margined with white ripple-shaped stria; lateral area with paired grayish black markings. The lateral and the ventral of abdomen light yellow, scattered with small white spots.

Female genitalia. Epigynum light yellow. Spermathecae large. Atrium with median-septum. Copulatory opening relatively large.

Male. Unknown.

Holotype ♀, paratype 1 ♀, Mt. Huping, (29°59′N, 110°29′, 700-1 300 m), Shimen County (29°35′N, 111°22′E), Hunan Province, 3 July 2003, collected by TANG Guo, etc.

Diagnosis. This species can be separated from Theridion karamyensis Zhu, 1998 by: 1) there are two white ripple-shaped striae on median dorsum; 2) copulatory ducts connect with spermathecae directly, its opening bilaterally, without twist; 3) atrium with median-septum absent from that of *Theridion karamyensis*.

Distribution. China (Hunan).

Etymology. The specific name refers to the ecological environment of the type locality.

REFERENCES

Barrion, A. T. and Litsinger, J. A. 1995. Riceland Spider of South and Southeast Asia. International, Wallingford, UK, xix + 700 pp.

Chen, Z-F and Zhang, Z-H 1991. Fauna of Zhejiang: Araneida. Zhejiang Sci. and Technol. Publ. House, Hangzhou. 365pp.

Song, D-X, Zhu, M-S and Chen, J 1999. The Spiders of China. Hebei Sci. Technol. Publ. House, Shijiazhuang, 640 pp.

Tang, G, Yin, C-M and Peng, X-J 2003. Two new species of the genus Chrysso from Hunan Province, China (Araneae, Theridiidae). Acta Zootaxon. Sin., 28 (1): 53-55. [动物分类学报]

Yaginuma, T. 1986. Spiders of Japan in Color. Hoikusha Publishing Co. Ltd. Osaka, 1-305.

Zhu, M-S 1998. Fauna Sinica, Arachnida, Araneae, Theridiidae. Science Press, Beijing. 44-69.

中国湖南省球蛛属两新种记述

唐 果 尹长民 彭贤锦

湖南师范大学生命科学学院 410081

摘 要 **记述了采自湖南省壶瓶山国家自然保护区内的球蛛属2新种：壶峰球蛛** *Theridion hufengensis* sp. nov. **和灌木球蛛** *Theridion fruticum* sp. nov.。**壶峰球蛛与琼海球蛛** *Theridion qionghaiensis* Zhu, 1998 **的主要区别是：1) 背部斑纹不同；2) 外雌器交媾腔不同，本种有中隔，交媾孔开口于两侧，后者开口于一处；3) 交媾管走向不同，本种由内向外延伸，后者由外侧向内侧弯曲。灌木球蛛与克拉球蛛** *Theridion karamyensis* Zhu, 1998 **的区别是：1) 本种正中条斑外有白色细边和灰黑波纹；2) 交媾管与纳精囊相接处无扭曲；3) 交媾腔有中隔，被分成2个圆形腔，而后者无中隔。模式标本保存在湖南师范大学生命科学学院。文中量度单位为** mm。

关键词 **蜘蛛目，球蛛科，球蛛属，新种.**

中图分类号 Q959.226